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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,028	08/17/2001	Toru Hayase	0445-0302P-SP	2692
2292	7590	11/17/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			ANDERSON, CATHARINE L	
			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,028

Applicant(s)

HAYASE ET AL.

Examiner

C. Lynne Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (5,449,353) in view of Coates (6,254,583).

Watanabe discloses all aspects of the claimed invention with the exception of a pair of cuffs. Watanabe discloses a shorts-type disposable diaper 1, as shown in figure 2, comprising a liquid permeable topsheet 2, a liquid impermeable anti-leakage sheet 3, and an absorbent core 4. The diaper 1 has a body-surrounding portion 5a and 5b, and a plurality of body-surrounding elastic members 16 extending in a circumferential width direction of the diaper 1 between the leg and waist portions, as shown in figure 6. The elastic members 16 are disposed in the side portions of the diaper 1 and are not disposed in at least a center portion of where the absorbent core 4 exists. The elastic members 16 are secured in their stretched state and form gathers, as disclosed in column 7, lines 14-22. The elastic members are disposed between and joined to the topsheet and the anti-leakage sheet, which are the inner and outer sheets of the exterior member of the diaper. The elastic members 16 are cut at their center portion so that they are not disposed in at least the center of the portion of the

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diaper 1 where the absorbent core 4 exists, as shown in figure 6. The elastic members 16 extend laterally across the lateral extent of each end portion of the diaper such that at least a portion of the elastic members 16 extend laterally from a position substantially co-extensive with the absorbent core 4, as shown in figure 5. The absorbent core 4 terminates before the end portion of the diaper, as shown in figure 1.

Coates teaches the use of a pair of cuffs 14 provided on lateral sides of the absorbent core 19 of an absorbent article and fixed to the topsheet 12, as shown in figure 1A. The cuffs 14 comprise a breathable liquid-resistant material, as disclosed in column 3, line 57, and have one end fixed to the topsheet 19 over the length of the article and the other end free, as shown in figure 1A. Opposing ends 12A and 12B of the exterior member are folded over onto the ends of the absorbent core 19. The cuffs 14 are coextensive with the absorbent core 19, as shown in figure 1A. The cuffs 14 provide the article with improved leak protection, as disclosed in column 1, lines 63-64.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the article of Watanabe with a pair of cuffs, as taught by Coates, to provide the article with improved leak protection.

With respect to claims 4 and 8, an elastic member 8 is fixedly disposed in the waist opening portion, as shown in figure 1, and has a greater elongation stress than the body surrounding elastic members 16, as disclosed in column 7, line 58 to column 8, line 1, and therefore has a greater 30% elongation stress.

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Given the ranges of elongation stresses disclosed, the ratio of elongations stresses will be between 1.5 and 6.0.

With respect to claim 6, Watanabe discloses all aspects of the claimed invention with the exception of the body-surrounding elastic members having inward ends that are slightly overlapping the absorbent core. It would have been an obvious matter of design choice to have the elastic members slightly overlap the absorbent core, since the applicant has not disclosed that this configuration serves any particular purpose or solves any stated problem, and it appears the invention would function equally well with the elastic members overlapping or not overlapping the absorbent core.

With respect to claim 7, the ratio of the width of the absorbent core 4 to the width of the diaper 1 is between 30% and 60%, as shown in figure 1. The ratio of the width of the portions containing the elastic members 11b to the width of the diaper 1 is between 40% and 95%, as shown in figure 1.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (5,449,353) in view of Coates (6,254,583), and further in view of Takabayashi et al. (5,817,087).

With respect to claim 2, Watanabe, as modified by Coates discloses all aspects of the claimed invention with the exception of the elastic members being positioned between the anti-leakage sheet and an outer sheet. Watanabe discloses a shorts-type disposable diaper 1, as shown in figure 2, comprising a liquid permeable topsheet 2, a liquid impermeable anti-leakage sheet 3, and an

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absorbent core 4. The diaper 1 has a body-surrounding portion 5a and 5b, and a plurality of body-surrounding elastic members 11b extending in a circumferential width direction of the diaper 1, as shown in figure 1. The elastic members 11b are disposed in the side portions of the diaper 1 and are not disposed in at least a center portion of where the absorbent core 4 exists. The elastic members 11b are secured in their stretched state, as disclosed in column 4, lines 61-63, and form gathers, as disclosed in column 6, lines 15-19. The elastic members are disposed between and joined to the topsheet and the anti-leakage sheet, which are the inner and outer sheets of the exterior member of the diaper. The elastic members 11b are cut at their center portion so that they are not disposed in at least the center of the portion of the diaper 1 where the absorbent core 4 exists.

Takabayashi discloses a disposable diaper 1, as shown in figure 1, comprising body-surrounding elastic members 31 and 41. The elastic members are positioned between an anti-leakage sheet 9 and an outer sheet 3, as shown in figure 6. Positioning the elastic members between the anti-leakage sheet and the outer sheet provide the diaper with increased comfort, as described in column 8, lines 47-56.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to position the elastic members of Watanabe between the anti-leakage sheet and an outer sheet, as taught by Takabayashi, to provide the diaper with increased comfort.

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With respect to claim 3, the anti-leakage sheet and outer sheet comprise the inner and outer sheet of an exterior member, which is fixed to the absorbent body by partial bonding, as disclosed in column 5, lines 48-50.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (5,449,353) in view of Coates (6,254,583), and further in view of Iskra (5,021,050).

Watanabe, as modified by Coates, discloses all aspects of the claimed invention but remains silent as to the Taber stiffness of the absorbent core.

Iskra discloses a disposable diaper 10, as shown in figure 1, comprising an absorbent core 16, as shown in figure 3. The absorbent core 16 has a Taber stiffness of less than about 7 g/cm, as disclosed in column 3, lines 31-40. The low Taber stiffness of the absorbent core 16 allows the absorbent core 16 to be flexible enough to bend to form the shape of the diaper 10, as shown in figure 1. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the absorbent core of Watanabe with a Taber stiffness of less than 7 g/cm, as taught by Iskra, to give the absorbent core suitable flexibility.

Response to Arguments

Applicant's arguments filed 24 August 2005 have been fully considered but they are not persuasive.

Applicant's arguments with respect to the rejection under 35 U.S.C. 103(a) in view of Ujimoto et al. '489 have been considered but are moot in view of the new ground(s) of rejection.

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In response to the applicant's argument that Watanabe fails to disclose the elastic members being both disposed between and joined to an inner sheet and an outer sheet of the exterior member, it is noted that the exterior member is not further defined in the instant claims. Therefore, the sheets disclosed by Watanabe to which the elastic members are joined are considered by the examiner to comprise inner and outer sheets of an exterior member, since the first sheet is located on the exterior of the article, and the other sheet is located inward of the first sheet.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CWA
cla

November 10, 2005

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER

